



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Joseph E. Kernan
Governor

Lori F. Kaplan
Commissioner

October 15, 2003

100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.in.gov/idem

TO: Interested Parties / Applicant

RE: Belmont Wastewater Treatment Facility / 097-16971-00032

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FNPER.dot 9/16/03



Frank O'Bannon
Governor

Lori F. Kaplan
Commissioner

100 North Senate Avenue
P. O. Box 6015
Indianapolis, Indiana 46206-6015
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PART 70 SIGNIFICANT SOURCE MODIFICATION OFFICE OF AIR QUALITY

**City of Indianapolis Belmont Advanced Wastewater Treatment Facility
Indianapolis Sludge Incinerator
2700 South Belmont Avenue
Indianapolis, Indiana 46221**

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this approval.

This approval is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Source Modification No.: 097-16971-00032	
Issued by: Original Signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: October 15, 2003

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SECTION A

SOURCE SUMMARY

This approval is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the emission units contained in Conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this approval pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary municipal waste water treatment plant with sewage sludge incinerators.

Responsible Official:	Director, Department of Public Works, City of Indianapolis
Source Address:	2700 South Belmont Avenue, Indianapolis, Indiana 46221
Mailing Address:	2460 City County Building, 200 East Washington Street, Indianapolis, Indiana 46204
General Source Phone:	317-639-7000
SIC Code:	4952
County Location:	Marion
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Major Source, under PSD Rules

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source is approved to rehabilitate and operate the following emission units and pollution control devices:

A Nichols multiple hearth wastewater treatment sludge incinerator, constructed in 1970, identified as I2, with a maximum sludge burning capacity of 2.6 dry tons/hr. Nine natural gas-fired auxiliary fuel burners also included as I2 with a capacity of 22.5 million BTU/hr total. Particulate and sulfur dioxide emissions are controlled by a Swemco venturi and tray impingement scrubber. Incinerator, I2, exhausts to stacks No. 01 and/or No. 03.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source modification does not include any insignificant activities as defined in 326 IAC 2-7-1(21).

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONSTRUCTION CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

B.3 Revocation of Permits [326 IAC 2-1.1-9(5)] [326 IAC 2-7-10.5(i)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.4 Significant Source Modification [326 IAC 2-7-10.5(h)]

- (a) The attached affidavit of construction shall be submitted to the Office of Air Quality (OAQ), Permits Branch. If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
- (b) The Permittee will receive an Operation Permit Validation Letter from the Permits Branch authorizing the operation of all or part of each emissions unit covered by the affirmation in the affidavit of construction. The letter shall be attached to this source modification approval.
- (c) Prior to receiving an Operation Permit Validation Letter, the Permittee may begin operating in accordance with the conditions in this approval the emissions units covered in this Significant Source Modification approval on the date the affidavit of construction is postmarked or hand delivered to IDEM if the emissions units were constructed as proposed in the application.
- (d) If actual construction of the emissions units differs from the construction proposed in the application, the source may not begin operation until the source modification has been revised pursuant to 326 IAC 2-7-11 or 326 IAC 2-7-12 and an Operation Permit Validation Letter is issued.
- (e) In the event that the Part 70 application is being processed at the same time as this application, the following additional procedures shall be followed for obtaining the right to operate:
 - (1) If the Part 70 draft permit has not gone on public notice, then the change/addition covered by the Significant Source Modification will be included in the Part 70 draft.
 - (2) If the Part 70 permit has gone through final EPA proposal and would be issued ahead of the Significant Source Modification, the Significant Source Modification will go through a concurrent 45 day EPA review. Then the Significant Source Modification will be incorporated into the final Part 70 permit at the time of issuance.
 - (3) If the Part 70 permit has gone through public notice, but has not gone through final EPA review and would be issued after the Significant Source Modification is issued, then the Modification would be added to the proposed Part 70 permit, and the Title V permit will be issued after EPA review.

C.1 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]

- C.2 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)]
[326 IAC 1-6-3]

- ### C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]
- (d) No permit amendment or modification is required for the addition, operation or removal of a nonroad engine, as defined in 40 CFR 89.2.

C.4 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary alternative opacity limitations), visible emissions shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.7 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted by using good engineering practices (GEP) pursuant to 326 IAC 1-7-3. The provisions of 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4(d), (e), and (f), and 326 IAC 1-7-5(d) are not federally enforceable.

Testing Requirements [326 IAC 2-7-6(1)]

C.8 Performance Testing [326 IAC 3-6] [326 IAC 2-1.1-11]

- (a) Compliance testing on new emission units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this approval, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this approval, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015

Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.9 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U.S. EPA.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.10 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

If required by Section D, all monitoring and record keeping requirements shall be implemented when operation begins. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment.

C.11 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.12 Emergency Provisions [326 IAC 2-7-16]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
 - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or

Telephone Number: 317-233-5674 (ask for Compliance Section)

Facsimile Number: 317-233-5967

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
 - (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
 - (e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(9) be revised in response to an emergency.
 - (f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
 - (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

C.13 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.14 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

- (a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.15 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

- (a) The reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
- (b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

A Nichols multiple hearth wastewater treatment sludge incinerator, constructed in 1970, identified as I2, with a maximum sludge burning capacity of 2.6 dry tons/hr. Nine natural gas-fired auxiliary fuel burners also included as I2 with a capacity of 22.5 million BTU/hr total. Particulate and sulfur dioxide emissions are controlled by a Swemco venturi and tray impingement scrubber. Incinerator, I2, exhausts to stacks No. 01 and/or No. 03.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 PSD Minor Limit [326 IAC 2-2]

- (a) The amount of dry sludge delivered to the No. 2 incinerator shall be limited to less than 17,712 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (b) Emissions of CO from the No. 2 incinerator shall not exceed 51.78 pounds per ton of dry sludge burned.

Compliance with these limits make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable, by limiting the CO emissions from the No. 2 incinerator to less than 458.58 tons per year. The source may petition to have the limits in (a) and (b) above modified based on the results of the stack testing required under Condition D.1.2, provided that the resulting allowable CO emissions are less than 458.58 tons per year, and the emissions of any other criteria pollutant are not increased above the PSD significant threshold listed in 326 IAC 2-2-1(jj)(1).

Compliance Determination Requirements

D.1.2 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Within 60 days after achieving maximum production rate, but no later than 180 days after post-rehabilitation start-up, in order to demonstrate compliance with Condition D.1.1, the Permittee shall perform CO testing for the No. 2 incinerator utilizing methods as approved by the Commissioner. Testing shall be conducted in accordance with Section C - Performance Testing.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.3 Record Keeping Requirements

- (a) To document compliance with Condition D.1.1, the Permittee shall maintain records of the amount of dry sludge burned in the No. 2 incinerator on a monthly basis. Records necessary to demonstrate compliance shall be available within thirty (30) days of the end of each compliance period.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.4 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.1 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY**

**PART 70 SOURCE MODIFICATION
CERTIFICATION**

Source Name: City of Indianapolis Belmont Advanced Wastewater Treatment Facility/
Indianapolis Sludge Incinerator
Source Address: 2700 South Belmont Avenue, Indianapolis, Indiana 46221
Mailing Address: 2460 City County Building, 200 East Washington Street, Indianapolis, Indiana
46204
Source Modification No.: SSM 097-16971-00032

**This certification shall be included when submitting monitoring, testing reports/results
or other documents as required by this approval.**

Please check what document is being certified:

- 9 Test Result (specify) _____
- 9 Report (specify) _____
- 9 Notification (specify) _____
- 9 Affidavit (specify) _____
- 9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Source Modification Quarterly Report

Source Name: City of Indianapolis Belmont Advanced Wastewater Treatment Facility/
Indianapolis Sludge Incinerator
Source Address: 2700 South Belmont Avenue, Indianapolis, Indiana 46221
Mailing Address: 2460 City County Building, 200 East Washington Street, Indianapolis, Indiana
46204
Source Modification No.: SSM 097-16971-00032
Facility: No. 2 incinerator
Parameter: Amount of sludge delivered to the No. 2 incinerator
Limit: 17,712 tons per twelve (12) consecutive month period, with compliance
determined at the end of each month, equivalent to a CO emission limitation
of less than 458.58 tons per year

YEAR: _____

Month	Sludge burned (tons)	Sludge burned (tons)	Sludge burned (tons)
	This Month	Previous 11 Months	12 Month Total

9 No deviation occurred in this month.

9 Deviation/s occurred in this month.
Deviation has been reported on: _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967**

**PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT**

Source Name: City of Indianapolis Belmont Advanced Wastewater Treatment Facility/
Indianapolis Sludge Incinerator
Source Address: 2700 South Belmont Avenue, Indianapolis, Indiana 46221
Mailing Address: 2460 City County Building, 200 East Washington Street, Indianapolis, Indiana
46204
Source Modification No.: SSM 097-16971-00032

This form consists of 2 page

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- | | |
|---|--|
| 9 | This is an emergency as defined in 326 IAC 2-7-1(12) |
| C | The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and |
| C | The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16. |

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A

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Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM ₁₀ , SO ₂ , VOC, NO _x , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

A certification is not required for this report.

Indiana Department of Environmental Management Office of Air Quality

Addendum to the Technical Support Document for a Part 70 Significant Source Modification

Source Name: City of Indianapolis Belmont Advanced Wastewater Treatment Facility/ Indianapolis Sludge Incinerator
Source Location: 2700 South Belmont Avenue, Indianapolis, Indiana 46221
County: Marion
SIC Code: 4952
Source Modification: SSM 097-16971-00032
Permit Reviewer: Edward A. Longenberger

On July 31, 2003, the Office of Air Quality (OAQ) had a notice published in the Indianapolis Star, Indianapolis, Indiana, stating that City of Indianapolis Belmont Advanced Wastewater Treatment Facility/ Indianapolis Sludge Incinerator had applied for a Significant Source Modification for the rehabilitation of the No. 2 multiple hearth municipal sewage sludge incinerator. The notice also stated that OAQ proposed to issue a Significant Source Modification for this operation and provided information on how the public could review the proposed Significant Source Modification and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this Significant Source Modification should be issued as proposed.

On August 22, 2003, Carlton Ray of the City of Indianapolis, Department of Public Works submitted comments on the proposed Significant Source Modification. The comments are as follows (the permit language, if changed, has deleted language as ~~strikeouts~~ and new language **bolded**):

Comment 1:

On the cover page, the word "Advanced" should be inserted after the word "Belmont" in the title. The same revision would need to be made in the header on each page and on all forms.

Response 1:

This change was made throughout the permit document.

Comment 2:

In Section A.2 of the permit, and in the Facility Description in Section D.1, the last sentence in each of these descriptions should be revised to read as follows: "Incinerator I2 exhausts to stacks No. 01 and or No. 03."

Response 2:

As requested, the following change was made to the descriptive information for the facility in Sections A.2 and D.1 of the source modification:

A Nichols multiple hearth wastewater treatment sludge incinerator, constructed in 1970, identified

as I2, with a maximum sludge burning capacity of 2.6 dry tons/hr. Nine natural gas-fired auxiliary fuel burners also included as I2 with a capacity of 22.5 million BTU/hr total. Particulate and sulfur dioxide emissions are controlled by a Swemco venturi and tray impingement scrubber. Incinerator, I2, exhausts to stacks No. 01 and/or No. 03.

Comment 3:

Condition B.4(d) requires the Permittee to receive the Operation Permit Validation Letter from the IDEM and attach it to the SSM prior to the start of operation. However, Condition B.4(a) provides that Incinerator I2 may begin operating on the date the Affidavit of Construction is post-marked or hand-delivered to IDEM. These conditions are inconsistent and Condition B.4(d) should not be listed as a requirement to be met prior to start of operation since the IDEM has five working days in which to send the Permittee the Operation Permit Validation Letter after receipt of the Affidavit of Construction.

Response 3:

After further review it was determined that Condition B.4 did contain contradictory language. IDEM, OAQ has made the following changes to Condition B.4:

B.4 Significant Source Modification [326 IAC 2-7-10.5(h)]

~~This document shall also become the approval to operate pursuant to 326 IAC 2-7-10.5(h) when, prior to start of operation, the following requirements are met:~~

- (a) The attached affidavit of construction shall be submitted to the Office of Air Quality (OAQ), Permits **Branch, Administration & Development Section**, verifying that the emission units ~~were constructed as proposed in the application.~~ **If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.**
- (b) The Permittee will receive an Operation Permit Validation Letter from the Permits Branch authorizing the operation of all or part of each emissions unit covered by the affirmation in the affidavit of construction. The letter shall be attached to this source modification approval.
- (c) **Prior to receiving an Operation Permit Validation Letter, the Permittee may begin operating in accordance with the conditions in this approval** ~~The emissions units covered in the this Significant Source Modification approval may begin operating on the date the affidavit of construction is postmarked or hand delivered to IDEM if the emissions units were constructed as proposed in the application.~~
- ~~(b)~~ (d) If actual construction of the emissions units differs from the construction proposed in the application, the source may not begin operation until the source modification has been revised pursuant to 326 IAC 2-7-11 or 326 IAC 2-7-12 and an Operation Permit Validation Letter is issued.

~~(c) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.~~

~~(d) The Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this document.~~

Comment 4:

With respect to Conditions C.5 and C.7, in order to be consistent with the draft Part 70 Operating Permit, it should be noted in each of these sections that the requirement is not federally enforceable.

Response 4:

Portions of 326 IAC 6-4 and 326 IAC 1-7 have not been approved by the US EPA as revisions to Indiana's State Implementation Plan, and as such are not federally enforceable. Conditions C.5 and C.7 have had the following statements added to indicate that portions of the requirements are not federally enforceable:

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). **326 IAC 6-4-2(4) is not federally enforceable.**

C.7 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted. **The provisions of 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4(d), (e), and (f), and 326 IAC 1-7-5(d) are not federally enforceable.**

Comment 5:

The form referenced in Condition C.12(b)(5) was not attached to the permit. The citation in Condition C.12(e) should be corrected to 326 IAC 2-7-4(c)(9).

Response 5:

The Emergency Occurrence Report Form, referenced in Condition C.12(b)(5), has been added to the end of the source modification document. Also, the citation in Condition C.12(e) was corrected as suggested:

C.12 Emergency Provisions [326 IAC 2-7-16]

(e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(9 ~~40~~) be revised in response to an emergency.

Comment 6:

In the second sentence of Section C.14(a) the word "kept" should be replaced with "physically present or electronically accessible," consistent with the model Part 70 Operating Permit.

Response 6:

The following change to Condition C.14(a) was made as a result of this comment:

C.14 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

- (a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be **physically present or electronically accessible** ~~kept~~ at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

Comment 7:

Facility Operation Conditions, Condition D.1.1. We would request that this condition be modified to indicate that the limits are designed to restrict annual CO emissions to less than 458.58 tons per year to ensure that the net increase in emissions is less than 100 tons/year. We would also request that this condition include an acknowledgment that the permit condition may be revised based on stack test results to adjust the emission limit and sludge production values while still ensuring that emissions do not exceed the 458.58 ton per year level. Specifically we would suggest that this condition be amended to read as follows:

D.1.1 PSD Minor Limit [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (PSD) not applicable to the rehabilitation of Incinerator No.2, CO emissions shall be limited to 458.58 tons per year. In order to meet this limit the following specific limitations shall be met. The source may petition to have these limits modified based on the results of the stack testing required under D.1.2 as long as the resulting allowable emissions do not exceed 458.58 tons per year.

- (a) The amount of dry sludge delivered to Incinerator No.2 shall be limited to less than 17,713 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (b) Emissions of CO from Incinerator I2 shall not exceed 51.78 pounds per ton of dry sludge burned.

Response 7:

The Permittee may request a change to the throughput limitation based on results of the stack test, as long as the change does not result in an increase in any of the other criteria pollutants over the PSD significant thresholds. Such a change would require public participation, pursuant to the requirements contained in 326 IAC 2-7-12 (Part 70 Permit Modifications). IDEM, OAQ has implemented the change as shown below:

D.1.1 PSD Minor Limit [326 IAC 2-2]

- (a) The amount of dry sludge delivered to the No. 2 incinerator shall be limited to less than 17,713 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (b) Emissions of CO from the No. 2 incinerator shall not exceed 51.78 pounds per ton of dry sludge burned.

Compliance with these limits make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable, **by limiting the CO emissions from the No. 2 incinerator to less than 458.58 tons per year. The source may petition to have the limits in (a) and (b) above modified based on the results of the stack testing required under Condition D.1.2, provided that the resulting allowable CO emissions are less than 458.58 tons per year, and the emissions of any other criteria pollutant are not increased above the PSD significant threshold listed in 326 IAC 2-2-1(jj)(1).**

On August 28, 2003, Steve Loeschner, a concerned citizen, submitted comments on the proposed Significant Source Modification. The comments are as follows (the permit language, if changed, has deleted language as ~~strikeouts~~ and new language **bolded**):

Comment 1:

Belmont desires to evade the law (regulation, rule) and evade the social responsibility in re the use of best available control technology by allegedly only having an increase in permitted carbon monoxide ("CO") of less than 100 tons per year from a base of 358.58 tons per year. An electronic search in 16971 for "358" produced a single response on p. 4 of the 16971 Technical Support Document ("TSD"), and there appears within 16971 no foundation whatsoever in re how the 358.58 amount was derived, nor any indication of its uncertainty. As response to comment, provide all associated math, measurement data and dates, and the uncertainties associated with the measurements.

Response 1:

The Federal PSD regulations require that for a modification to be considered a minor PSD modification to an existing major PSD source the net emissions increase need to be less than the PSD Significant Levels. The net emissions are determined by comparing the future potential emissions from the modified facility to the past actual emissions. The past actual emissions shall be the average annual actual emissions averaged for the most recent available two (2) year period. The 358.58 tons of CO per year is an annual average actual CO emission rate for the No. 2 incinerator. This value is the average annual CO emissions for the most recent two (2) year period of 2001 and 2002. It was calculated by multiplying the actual recorded sludge throughput during the two (2) year period by the CO emission factor of 51.78 pounds per ton of sludge burned. The CO emission factor of 51.78 pounds per ton of sludge burned was determined through stack testing performed at the source in 1996.

In this case the future potential CO emissions of the No. 2 incinerator have been limited to less than 458.58 tons per year, so that the net emissions are limited to less than one hundred (100) tons per year, which is the PSD Significant Level for CO.

Comment 2:

The amount of dry sludge delivered to the No. 2 incinerator shall be limited to less than 17,713 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. This limitation is equivalent to a CO emission limitation of less than 458.58 tons per year, based on the source specific emission factor of 51.78 pounds per ton of sludge burned. The limitation will ensure that the net emissions increase from the modification will be less than one hundred (100) tons of CO per year.

$17,713 \times 51.78 / 2,000 - 358.58 = 100.009$ -- in excess of 100, not less than 100. Obviously the DEM desire to pander to the polluter is great. Further, it is insanity to suggest that this limit is in any way protected by a once-every-five-year (or perhaps less frequent) rate test.

Response 2:

The CO emissions from the No. 2 incinerator are determined by multiplying the sludge throughput in tons per hour by the appropriate CO emission factor in units of pounds of CO emitted per ton of sludge throughput. The emission factor of 51.78 pounds of CO per ton of sludge incinerated was determined by a previous stack test performed during 1996. In order to verify that this emission factor is currently appropriate for the modified incinerator, a stack test has been required to be completed within 60 to 180 days of startup of the rehabilitated incinerator. Verification that this emission factor is not exceeded will ensure that the throughput limit will limit CO emissions to less than 458.58 tons per year. If the stack indicates that the actual CO emission factor exceeds 51.78 pounds per hour, then the throughput limit of sludge will be adjusted accordingly.

Thank you for pointing out that the sludge throughput limitation of 17,713 tons per year results in a net emissions increase greater than one hundred (100) tons per year. In order to ensure that the permitted CO emission increase is less than, and not equal to, one hundred (100) tons per year, the annual sludge throughput limit has been lowered to 17,712 tons per year:

D.1.1 PSD Minor Limit [326 IAC 2-2]

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- (a) The amount of dry sludge delivered to the No. 2 incinerator shall be limited to less than **17,712** ~~17,713~~ tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (b) Emissions of CO from the No. 2 incinerator shall not exceed 51.78 pounds per ton of dry sludge burned.

Comment 3:

There appears within 16971 no foundation whatsoever in re how the 51.78 rate was derived. As response to comment, provide all associated math, measurement data and dates, and the uncertainties associated with the measurements.

Response 3:

The emission rate of 51.78 pounds of CO emitted per ton of dry sludge burned is derived from stack tests performed at the source in 1996. Pursuant to Condition D.1.2 of this source modification, the No. 2 incinerator will be tested to demonstrate that the CO emission rate is less than or equal to the prescribed emission rate. See Response 2.

Comment 4:

It appears that Belmont has evaded PSD for many years. For an equal time, the people have had no good clue as to what the CO emission was as there was no continuous emission monitoring system (CEM). A CO CEM should be required that gives a weight of CO per unit time accumulation based on a CO per unit volume and a volume per unit time measurement pair. The permit limits should be for CO, not arbitrary dry sludge, and should be reduced to account for measurement error. I.e. if the CEM could present a reading that was 93% of the actual, then the actual permitted limit should not exceed 426.47 tons per year CO with prompt public quarterly reporting of monthly and 12-month cumulative amounts.

Response 4:

The facility was constructed prior to the applicability date of 326 IAC 2-2, PSD regulations. However, the facility is classified as an existing major PSD source since the PSD definition emissions of CO exceed two hundred and fifty (250) tons per year. As an existing major PSD source all future modifications would be subject to the PSD rules unless the net emission increases are less than the PSD Significant Levels. 326 IAC 2-2 allows for a net increase of CO emissions of less than one hundred (100) tons per year. In this modification the future potential emissions of the No. 2 incinerator have been limited to less than 458.58 tons per year, to ensure that the net CO emissions are less than one hundred (100) tons per year. The IDEM, OAQ can not require that the net CO emissions be limited to an annual emission rate that has been arbitrarily set at less than the PSD Significant Level of one hundred (100) tons per year.

The throughput of dry sludge to the incinerator, combined with a measured CO emission rate in terms of weight of CO emitted per ton of dry sludge burned, was used to limit the potential to emit CO from the No. 2 incinerator. The CO emissions are calculated using a valid CO emission factor, determined and verified by stack testing of the incinerator, multiplied by the actual sludge throughput. The permit requires that the source maintain records of the actual amount of sludge burned at the No. 2 incinerator, and submit reports on a quarterly basis. Thus, the CO emissions can be calculated at any time by performing this calculation, and compliance with the permit limits can be verified.

Comment 5:

Why were 2001 and not 2002 actual emissions presented on 16971 TSD p. 2? Present the 2002 data as response to comment. Was that data for the single incinerator, or was it for the entire site?

Response 5:

The actual emissions information on page 2 of the Technical Support Document represents the actual emissions from the entire source. The most recent available actual emissions from the entire source are for the year 2001.